

### **ABSTRACT**

A system and method is provided for analyzing data obtained during manufacture of a web of paper or paperboard on a machine. The system comprises a computer including a database module, a statistical analysis module, and a processor for executing the modules. The database module contains measurements of quality parameters obtained from the web during manufacture. The statistical analysis module is executed by the processor to analyze the measurement data and estimate a target shift in at least one quality parameter that could be made if the controllable variations were removed. The target shift can be transformed into an economic amount (i.e., dollar value) by the statistical analysis module to assist the mill operator with making well informed, economic based decisions. The system further includes a diagnostic module capable of automatically identifying machine parameters that correlate to quality parameters that caused the web to fall outside the desired quality specifications.